



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/486,787 | 03/02/2000 | JOHN P. HART | 36968/191614 | 1002 |

38823 7590 11/22/2005

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP/
BELLSOUTH I.P. CORP
100 GALLERIA PARKWAY
SUITE 1750
ATLANTA, GA 30339

EXAMINER

MILLER, BRANDON J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2683

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,787

Applicant(s)

HART ET AL.

Examiner

Brandon J. Miller

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah in view of Coppinger and Nageli.

Regarding claim 1 Shah teaches a method for dispatching work orders and receiving status information concerning such orders via a communications network adapted to communicate two- way messages (see col. 11, lines 49-54, col. 15, lines 1-3, and col. 17, lines 8-10 & 14-26). Shah teaches coupling a communication device to a dispatch computer, wherein the communication device is adapted to send and receive two-way messages and wherein the message includes status-type information (see col. 11, lines 49-55, col. 12, lines 36-43 and col. 17, lines 8-10 & 14-26). Shah teaches formatting a dispatch order into at least one two-way message; and forwarding the two-way message over the communication network to a selected communication device or group of communication devices (see col. 11, lines 49-57 and col. 17, lines 8-10 & 14-26). Shah does not specifically teach a network adapted to communicate short message service ("SMS") messages, reformatting the SMS message into an Internet packet, or forwarding the Internet packet over a communications network. Coppinger teaches a network adapted to communicate messages to people, reformatting the message to Internet specifications,

Art Unit: 2683

and forwarding the Internet message over a communications network (see col. 2, lines 59-62, col. 4, lines 29-39, and col. 6, lines 22-27). Nageli teaches a system adapted to communicate short message service ("SMS") messages over a (GPRS) network and forwarding the packet data over the communications network (see col. 3, lines 29-35, col. 4, lines 59-67 and col. 5, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include a system adapted to communicate short message service ("SMS") messages and reformatting the SMS message into an Internet packet for transmission because a two-way message can be sent over the Internet and this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Regarding claim 2 Shah teaches a selected communication device that is provided with a response to the dispatch order (see col. 17, lines 12-23). Shah teaches formulating at least a portion of the response into a reply two-way message (see col. 11, lines 49-54 and col. 17, lines 13-15). Shah teaches forwarding from the selected communication device a reply message containing the response to the communication device, wherein the communication device provides at least a portion of the two-way message to the dispatch computer for storage or display (see col. 17, lines 12-26). Shah does not specifically teach a network adapted to communicate short message service ("SMS") messages. Nageli teaches a network adapted to communicate short message service ("SMS") messages (see col. 3, lines 29-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include a system adapted to communicate short message

Art Unit: 2683

service ("SMS") messages because this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Regarding claim 3 Shah teaches a response that comprises status information describing the status of the dispatch order (see col. 17, lines 12-19).

Regarding claim 4 Shah teaches allowing creation of a new dispatch order; and formulating a new dispatch order into one or multiple messages (see col. 17, lines 16-19 & 28-36). Shah teaches updating a database associated with the dispatch computer that stores each dispatch order and information concerning the status of each dispatch order; and transmit upon command from the dispatch operator the one or more messages (see col. 17, lines 16-19 & 28-36). Shah does not specifically teach determining the length of a new dispatch order and, based on the determined length, formulating a dispatch order into one SMS message or multiple, related SMS messages. Nageli teaches a message that contains steering codes which determines the manner in which the message is to be treated (see col. 3, lines 39-43). Nageli teaches formulating a dispatch order into an SMS message and processing the SMS message based on a predetermined format (see col. 4, lines 23-25 & 63-67 and col. 5, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include determining the length of a new dispatch order and, based on the determined length, formulating a dispatch order into one SMS message or multiple, related SMS messages because this would allow for improved transmission of SMS messages to remote communication devices.

Regarding claim 5 Shah teaches displaying on a dispatch computer pending dispatch orders; and updating the database upon the receipt of a reply message from a selected mobile unit

Art Unit: 2683

concerning the dispatch order being addressed by the mobile unit (see col. 17, lines 5-10 & 14-19). Shah does not specifically teach a reply SMS message from a selected service technician. Shah does teach mobile entities that include people performing service related tasks (see col. 5, lines 23-35). Nageli teaches transmitting SMS messages from one or more dispatcher stations to and from one or more stand-alone devices (see col. 3, lines 29-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include a reply SMS message from a selected service technician because this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Regarding claim 6 Shah teaches a method for dispatching orders to mobile units remotely and receiving responsive information from such mobile units concerning orders via at least one wireless network adapted to transmit two-way messages to allow communication among a central processor and mobile units without making a wireless telephone call (see col. 11, lines 25-31 & 49-58 and col. 17, lines 8-10 & 14-26). Shah teaches providing each mobile unit with a processor and a transceiver adapted to communicate via two-way messages (see col. 5, lines 23-35, col. 10, lines 10-20, and col. 11, lines 49-54). Shah teaches periodically causing a central processor to formulate a two-way message to a selected mobile unit that provides the mobile unit a dispatch order, wherein the two-way message includes status-type information (see col. 17, lines 8-10 & 14-26). Shah teaches transmitting a message over a wireless network via a two-way messaging center within a wireless network; and receiving the message at a selected mobile units transceiver (see col. 11, lines 49-58 and col. 17, lines 8-10 & 14-26). Shah does not specifically teach dispatching orders to service technicians, communicating short message service ("SMS")

Art Unit: 2683

messages, a short message center coupled to a mobile switching center, reformatting a message into at least one Internet packet; and transmitting the message over an IP network. Shah does teach mobile entities that include people performing service related tasks (see col. 5, lines 23-35). Coppinger teaches a network adapted to communicate messages to people, reformatting the message to Internet specifications, and transmitting the Internet message over a communications network (see col. 2, lines 59-62, col. 4, lines 29-39, and col. 6, lines 22-27). Nageli teaches a system adapted to communicate short message service ("SMS") messages over a (GPRS) network and forwarding the packet data over the communications network (see col. 3, lines 29-35, col. 4, lines 59-67 and col. 5, lines 1-8). Nageli teaches transmitting a message over a wireless network in a manner consistent with methods well known in the art (see col. 5, lines 37-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include a system adapted for dispatching orders to service technicians, communicating short message service ("SMS") messages, a short message center coupled to a mobile switching center, reformatting a message into at least one Internet packet; and transmitting the message over an IP network because a two-way message can be sent over the Internet and this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Regarding claim 7 Shah teaches receiving from a selected mobile unit a response message indicating status of an order (see col. 17, lines 14-19).

Regarding claim 8 Shah teaches receiving and storing response messages from multiple mobile units, in which each responsive message indicates the status of a dispatch order being fulfilled by the respective mobile unit (see col. 5, lines 36-44, col. 17, lines 14-19 and FIG. 5).

Regarding claim 10 Shah and Coppinger teach a device as recited in claim 9 except for a preselected format that is SMS and the network element is a short messaging center ("SMSC"). Nageli teaches a format that is SMS and a network element for identifying the message (see col. 3, lines 29-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a preselected format that is SMS and the network element is a short messaging center ("SMSC") because this would allow for improved two-way communication between a computer aided dispatch system and a remote communication device.

Regarding claim 11 Shah and Coppinger teach a device as recited in claim 9 except for a pre-selected format that is GPRS and a network element is a base station control determines that the message is GPRS data transmission and routes the message to another network element comprising a support node. Nageli teaches a message format the is GPRS and utilizing GSM/GPRS signaling protocol consistent with methods well known in the art (see col. 5, lines 1-8 & 37-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a pre-selected format that is GPRS and a network element is a base station control determines that the message is GPRS data transmission and routes the message to another network element comprising a support node because this would allow for efficient communication of two-way packet data over a GPRS network.

Regarding claim 12 Shah teaches receiving messages from multiple mobile units (see col. 1, lines 59-67).

Regarding claim 13 Shah teaches a processor that receives messages and places the received messages into a database comprising various fields describing dispatch orders and their status (see col. 5, lines 36-44 and FIG. 5).

Regarding claim 14 Nageli teaches providing a default field for formulating a message (see col. 9, lines 20-26).

Regarding claim 15 Shah teaches a dispatch work order that is formulated into a two-way message by a processor, which thereafter forwards at least one message for delivery to a selected mobile unit (see col. 11, lines 49-51 and col. 17, lines 7-10). Shah does not specifically teach a SMS message for delivery to a service technician. Shah does teach mobile entities that include people performing service related tasks (see col. 5, lines 23-35). Nageli teaches a dispatch message that is formulated into at least one SMS message, which thereafter forwards the at least one SMS message for delivery to a selected device (see col. 3, lines 29-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include a system adapted for dispatching orders to a SMS message for delivery to a service technician because a two-way message can be sent utilizing a SMS system and this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Regarding claim 16 Shah teaches a processor that updates a database of dispatch orders to indicate the status of the dispatch orders or to remove the dispatch orders from the database upon command from the dispatch operator (see col. 12, lines 14-35).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah in view of Coppinger.

Regarding claim 9 Shah teaches a method for managing dispatch applications in order to deliver messages from or to each of multiple mobile units deployed over a geographically-dispersed area (see col. 3, lines 9-15 & 35-38 and col. 11, lines 49-52). Shah teaches formulating at a central processor a message to at least one of the mobile units for wireless transmission according to a pre-selected format, wherein the message contains status-type information (see col. 11, lines 25-31 & 49-55 and col. 17, lines 8-10 & 14-26). Shah teaches transmitting a message to a network element for identifying that message (see col. 13, lines 66-67 and col. 14, lines 1-4). Shah teaches transferring a message from a network element to a communication device, wherein the communication device is capable of forwarding from the mobile unit a reply message concerning the status of the dispatch order (see col. 17, lines 7-10 & 14-26). Shah does not specifically teach dispatching applications to multiple service technicians, reformatting a message to an Internet protocol, or a communication device adapted to cause a message to be displayed. Shah does teach mobile entities that include people performing service related tasks (see col. 5, lines 23-35). Shah does teach a mobile unit able to communicate video signals (see col. 10, lines 15-18 & 22-24). Coppinger teaches a network adapted to communicate messages to people, reformatting the message to Internet specifications, and forwarding the Internet message over a communications network (see col. 2, lines 59-62, col. 4, lines 29-39, and col. 6, lines 22-27). Coppinger teaches adapted to cause a message to be displayed (see col. 2, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the two-way messaging system in Shah to include dispatching applications to multiple service technicians, reformatting a message to an Internet protocol, or a communication device adapted to cause a message to be displayed because two-way messages can be sent over

Art Unit: 2683

the Internet and this would allow for efficient data communication between a computer aided dispatch system and a remote communication device.

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Duske, Jr. et al. U.S. Patent No. 6,292,473 B1 discloses mobile communications terminal for satellite communications system.

Art Unit: 2683

Kennedy, III et al. U.S. Patent No. 6,240,295 B1 discloses data messaging in a communications network using a feature request.

Ray et al. U.S. Patent No. 6,067,529 discloses a system and method for sending a short message containing purchase information to a destination terminal.

Gleason U.S. Patent No. 5,966,663 discloses a data communications protocol for facilitating communications between a message entry device and a messaging center.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



November 15, 2005



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600